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(54) **Method for purifying titanium oxide ores.**

(57) TiO_2 ore is purified by roasting with an alkali metal compound and leaching with a nonsulfuric mineral acid. If undesirable iron containing minerals are present in the ore, carbon can be incorporated in the roasting step followed by magnetic separation to remove the iron containing minerals. Or, to remove the iron containing minerals, the ore can be subjected to a separate iron removing process which consists of roasting with carbon, followed by magnetic separation. The separate iron removing process can be done before or after the roasting with an alkali metal compound. The purified TiO_2 can be used for any process where a purified ore is desired. Preferred is using the ore to make TiO_2 pigment.

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EUROPEAN SEARCH REPORT

Application Number

EP 87 10 4943

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	FR-A-1 017 792 (NATIONAL TITANIUM PIGMENTS LTD) * Whole document *	1-8,20-23	C 22 B 34/12 C 01 G 23/07
X	FR-A- 690 349 (L. PELLEREAU) * Whole document *	1	
X	FR-A- 677 370 (M.R. RAFFIN) * Whole document *	1	
X	GB-A-1 431 552 (LAPORTE INDUSTRIES LTD) * Claims *	1-23	
X	GB-A- 791 366 (TITAN CO A/S) * Whole document *	1-23	
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X	US-A-3 660 029 (A.G.E. NAGUIB) * Claims *	1-23	C 22 B
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X	JAPANESE PATENT REPORTS, section M25, vol. 74, no. 22; & JP-A-7 420 688 (SAKAI CHEMICAL IND. LTD) 27-05-1974 * Abstract *	1-8,20-23	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-11-1987	Examiner JACOBS J.J.E.G.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document			





DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	US-A-2 441 856 (J.L. TUNER) * Claims *	1	
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			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
The present search report has been drawn up for all claims			
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